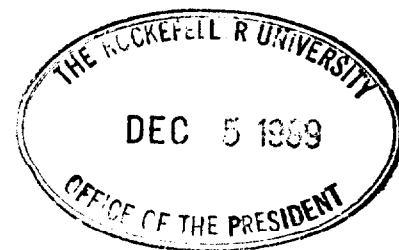


University of Illinois
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November 27, 1989

Dr. Joshua Lederberg, President
Rockefeller University
1230 York Avenue
New York, New York 10021-6399

Dear Dr. Lederberg:

Enclosed for your information is a release notice of "Kunitz" a new soybean cultivar. I suggested the name in honor of the late Professor Moses Kunitz of Rockefeller University who first isolated and characterized the Kunitz trypsin inhibitor in soybeans.

The story behind the development of "Kunitz" might be of interest to you. In 1967, I was appointed to this faculty by Dr. Marlowe D. Thorne then Head, Department of Agronomy, University of Illinois. Dr. Thorne knew that it would be almost impossible for me to survive an in-house faculty selection committee. I was born in Manhattan and graduated the Crown Heights Yeshivah and Boys High School in Brooklyn. Then and at present faculty in this department are primarily selected, promoted and given salary raises based upon where they were born, religious affiliations, sports interests, etc. This Grove of Academe hasn't changed since the bitter experiences of Kornberg and Lederberg.

I'm shocked to hear that.

By late 1968, after a thorough review of the literature I was convinced that the Kunitz trypsin inhibitor did not play a major role in soybean metabolism or germination. Secondly, I was convinced that a soybean lacking the inhibitor potentially could be utilized as a direct feed to animals rather than having to go through an expensive steam process to inactivate the inhibitor. Thus, I set out to locate a soybean lacking the inhibitor. The plant physiologists and biochemists here believed that I was wasting my time. They concluded that if I did find a soybean seed lacking the inhibitor it would not germinate or if it germinated the plant would be agronomically useless. I outright rejected their views and subsequently horrendous conflicts arose in the department. Destroying a paradigm is not an easy task.

Utilizing a simple PAGE system, I plugged away analyzing thousands of soybean accessions seeking the elusive soybean lacking the inhibitor. Starting in 1975 and for the next decade, the so-called conservative farmers in the State of Illinois funded the research activities. In 1979, with graduate student Jim Orf, I published a paper elucidating the inheritance

of the absence of the Kunitz trypsin inhibitor in seed protein of soybeans. The absence of the inhibitor is a simply inherited recessive trait.

For the past ten years with the cooperation of a colleague in soybean breeding, several commercially grown soybean cultivars adapted to Illinois were converted over to adapted lines lacking the inhibitor. Yield trials revealed that the near-isolines lacking the Kunitz inhibitor in seed yielded similarly to those cultivars containing the inhibitor. In addition, economic traits such as protein and oil content in seed were about the same in both Kunitz inhibitor containing and Kunitz lacking soybean lines.

As multiplied seed became available, colleagues in animal nutrition conducted rat, chick, piglet and fattening swine feeding trials. The fattening swine feeding trial yielded remarkable results, that is, the beans lacking the Kunitz inhibitor when fed raw to animals produced similar gains as did processed heated beans. Results with the rats, chicks and piglets revealed that the Bowman-Birk inhibitor still remaining in the beans was reducing feed efficiency rates. Thus the Kunitz soybean cultivar is limited for use in fattening swine, that is, from 50 kg to 100 kg weight.

Several years ago, in the New York Times, I read the obituary of Dr. Moses Kunitz. At that time, I thought to myself that it was unfortunate he could not witness the fruits of his labors. The very best I can do now is to honor Dr. Kunitz by naming the new soybean cultivar after him.

Sincerely yours,

A handwritten signature in cursive script that reads "Theodore Hymowitz".

Theodore Hymowitz
Professor, Plant Genetics

TH:lrt

Enc.